



ESG WHITE PAPER

Revolutionizing the Lending Process with IBM Cloud Paks

Achieving a Customer-centric Future by Enabling Rapid Transformation, Accelerating Innovation, Modernizing Infrastructure, and Reducing Risk

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Introduction

As with all industries, the financial services industry is experiencing rapid digital transformation. In fact, 82% of financial services organizations are either in the planning stages, just getting started, or in the process of implementing and executing various digital transformation initiatives.¹ These organizations want to improve operational efficiency, provide better and more differentiated customer experiences, and adopt digital tools and processes to allow users to interact and collaborate in new ways. But challenges remain. With banking and lending in particular, monolithic infrastructure has become increasingly complex, inflexible, and costly. Manual processes have proven to be slow and error-prone. And rising security threats and evolving compliance requirements have increased risk throughout the lending process that has delayed digital transformation success. As lenders grapple with these challenges, they continue to look for partners that can help enable rapid transformation, accelerate innovation, modernize infrastructure, and reduce risk, all while embracing the use of more data, automation, and AI to achieve their lofty, customer-centric goals.

Challenges with Traditional Lending

Lenders are constantly plagued with barriers to achieving their digital transformation goals. From loan origination to servicing and ongoing portfolio management, barriers throughout the financing value chain are creating complexity, delays, and risk. Manual data entry during the loan origination process is time-consuming and error-prone, never mind the fact that many lenders are entering the same information across documents several times. This has proven to be one of the largest obstacles in the lending process. Credit scoring and risk assessment are increasingly reliant on human judgment due to outdated or fragmented risk models. Ultimate decision-making is regularly disrupted due to inefficient and inconsistent document gathering. Missing documents regularly lead to delays during final compliance and audit checks.

Once loans are issued, servicing then introduces a new set of challenges. The ongoing review process regularly requires manual, time-consuming data collection, making payment tracking and collection difficult. And in the case of loan defaults, many banks lack controls to effectively track them, never mind integrate and consolidate reports that can enable banks to take the appropriate action. Put it all together and it's clear that lenders need help in increasing the speed of the lending process, driving loan growth, and managing credit risk.

Falling Back on IT

For lenders, many challenges often fall back on IT and the underlying architecture and technology stack. Legacy infrastructure is simply unable to keep up with the demand of modern banking workloads, processes, and data-centric initiatives. IT must evolve its traditional focus on middle- and back-office activities that are increasingly irrelevant in a modern, customer-first banking world. But as IT acts, complexity is proving to increase. Over three-quarters (77%) of IT organizations within the financial services space state that their IT environments are more complex than two years ago. Between the move to the cloud, increase in remote work, the dynamic cybersecurity landscape, new data security and privacy regulations, larger data volumes, and the need to incorporate emerging technologies like AI and robotic process automation, the pressure has fallen on IT to modernize their architectures and consumption models in support of new banking paradigms.



77% of senior IT decision makers in financial services believe IT complexity has increased over the past two years.

¹ Source: ESG Research Report, [2021 Technology Spending Intentions Survey](#), January 2021. All ESG research references in this white paper have been taken from this research report.

For most banks, that means IT will be tasked with moving off monolithic, inflexible, and expensive infrastructure in support of a modern business architecture that delivers agility, modularity, interoperability, and intelligence. Another challenge for IT as they embark on this transformative journey is the fact that technology skills gaps exist in several areas throughout the business. Half (50%) of financial services organizations have a problematic shortage of existing skills in cybersecurity, 44% in cloud architecture/planning, 30% in AI/ML, and 29% in IT orchestration and automation. IT needs help in efficiently implementing, deploying, and delivering the right resources and technology at the right time to better support modern banking.

Taking Action to Support a Customer-first Mindset

With a goal of evolving their business models, modernizing IT, and more effectively meeting customer demands, ESG research shows that most financial services organizations (55%) report that they are increasing their technology spending in 2021. Today, the top business objective for banks is improving operational efficiency and one of the top business initiatives driving the most technology spending is improving the customer experience. This is being achieved by investing in several areas of the business, including automating processes, reducing/optimizing resource usage, and improving asset tracking. This customer-centric transformation can be seen today from many banks that have already made it significantly easier for their borrowers to apply for a loan, but the focus is now shifting to back-end processes like more effectively navigating the loan origination process. Banks are turning to the cloud, increasing data intelligence, and reducing risk with seamless integration and end-to-end automation.

The Cloud

As banks look to reshape the way they engage with customers and deliver a next-generation customer experience, the public cloud is proving to be critical. 85% of



85% of financial services organizations currently use public cloud services to satisfy application workload requirements.

financial services organizations currently use the cloud, with another 14% planning to use or interested in the cloud. The experience from banks leveraging the cloud to date is eye-opening, with a majority having their expectations met, if not surpassed, in the following areas: performance, availability, customer service, security, scalability, migrations, and purchasing. The modularity, agility, and interoperability introduced by leveraging the cloud has set organizations up to successfully achieve their infrastructure and data modernization goals. Further, the cloud is proving to lower the barrier to entry for several technology initiatives by providing access to the latest and greatest technologies and data services, and through the increasing number of managed service offerings, alleviating IT operational pain points too.

Integration

Banks are prioritizing architectures that enable improved business, financial tool, and data integration. The end-to-end lending lifecycle, from application to origination to



43% of financial services organizations cite data integration as the top investment area of data management and analytics.

servicing and management, consists of a myriad of tools. As lenders look to consolidate those ecosystems and make the most informed decisions, ensuring the proper integrations with credit bureaus and other financial tools can enable a more rapid response to customers. Data from all these locations and systems must be properly integrated, organized, analyzed, visualized, and governed to ensure consistently high data quality. This is a big reason why ESG research shows that 43% of financial organizations reported data integration as their top area of data analytics investment going forward.



40% of financial services organizations cite improving data analytics for real-time business intelligence and customer insight as the top initiative driving the most spending.

Analytics

ESG research shows that 40% of financial services organizations cite improving data analytics for real-time business intelligence and customer insight as a top initiative driving the most technology

spending. To achieve their customer-centric goals, banks and lenders recognize the need for gaining faster and better insight from more data that is constantly growing and distributed across environments. Creating a personalized experience for each customer based on historic and real-time data analysis will enable banks to deliver a seamless customer experience rooted in digitization and cognitive engagement. Through internal, data-driven services, banks will be set up to own the customer journey, from customers just beginning their financial journeys via a car loan or credit card all the way through long-term living and EOL preparedness. Banks will be enabled to be proactive in offerings at the right time to deliver right-sized value based on where the customer is in their financial journey.

Artificial Intelligence

With artificial intelligence delivering unparalleled value in the banking industry, lenders are looking for fast onramp of next-generation AI services to deliver automation and real-time



67% of financial services organizations plan to increase their technology spending on AI over the next year.

insight throughout the lending lifecycle. This aligns to ESG research that shows 67% of financial services organizations will be increasing spending on AI over the next year. Banks are looking to intelligently collect, store, and organize loan documentation using text analytics and OCR capabilities. Virtual assistants are being leveraged to improve all aspects of customer touchpoints, from pre-screening to customer onboarding and customer service. The time to work through the loan approval process can be significantly reduced through up-to-date credit scoring models. And for auditing, banks are building continuous risk assessment tools that automate the monitoring of risk status and trends to provide a comprehensive and dynamic view of risk for an audit entity at any given time and automate the compilation of the audit plan.



50% of financial services organizations cite strengthening cybersecurity as an initiative driving the most technology spending over the next year.

Risk/Security

From an operational standpoint, risk reduction is regularly a top priority in the banking industry. The last thing a bank wants is to see its

name in the next headline due to a security breach or for failing a compliance audit that exposes customer data. Customers want peace of mind knowing their data is secure, and banks want to deliver trust to their customers. It's a big reason why half (50%) of financial organizations cite strengthening cybersecurity as an initiative driving the most technology spending over the next year, and more than 1 in 4 cite regulatory compliance assurance. Banks want to consolidate their security and compliance frameworks, tools, and standards to satisfy the dynamic security and compliance ecosystem more effectively within the financial services industry. That means they will look to solutions that can ensure automated and continuous security and compliance across services, workloads, and partners.

IBM Cloud Paks

IBM believes a hybrid cloud architecture built on AI technology will enable business and technology leaders to deliver IT and applications that are responsive, open, and easily consumed anywhere they are needed. As organizations progress down the digital transformation path, they continue to look for ways to modernize their applications and infrastructure across environments, improve operational efficiency, and bring more agility into the business. IBM has introduced IBM Cloud Paks to deliver great value through a hybrid-cloud enabled, fully integrated platform that can:

- Accelerate innovation and digital transformation initiatives spanning distributed environments with increased portability through containerized solutions that run on Red Hat OpenShift.
- Deliver tightly integrated capabilities and processes to eliminate redundant, time-consuming tasks and satisfy the desire to infuse more automation and agility into the business, leading to higher efficiency and greater ROI.
- Improve collaboration across business units that are increasingly involved in strategic business decisions.
- Address skills shortages in a timely manner to prevent delays in achieving business goals.
- Deliver security and operational consistency through a single control plane that enables a common management experience across environments to improve productivity and lower TCO.

IBM Cloud Paks, AI-powered hybrid cloud software, are designed to accelerate application modernization with pre-integrated data, automation, and security capabilities. Built on Red Hat OpenShift, IBM Cloud Paks deliver the industry's only hybrid cloud platform experience, enabling business and IT teams to build and modernize applications faster across any cloud or IT infrastructure—on-premises, in all public clouds, and on the edge. This gives enterprises the flexibility they need to grow, enhances employee productivity, and drives technology-based business innovation.

IBM Cloud Paks seamlessly integrate software capabilities from IBM, its partner ecosystem, and the open-source community. All of these can be managed with a unified, intelligent control plane and consumed anywhere, as a service, to deliver faster business outcomes.

SME Lending

Traditionally, the loan origination process is costly and time-consuming. It takes weeks for banks to reach a decision, and in many cases, it takes months after the decision is made to receive the money. Using different components within a collection of IBM Cloud Paks and IBM Financial Services Workbench, banks can revolutionize the loan origination and approval process. Underwriters can utilize automated business workflows and robotic process automation to free up time and reduce mundane, error-prone tasks like filling out the same text fields multiple times across documents. Lenders can leverage predictive analytics to conduct what-if scenario analysis quickly and accurately. Integration developers can securely connect the existing environment and various cloud systems without writing a single line of code. Compliance teams can rapidly respond to audits or adjust policies based on new standards, while security and governance teams can ensure trust in data access, usage, sharing, and availability. Financial services organizations can digitally transform without disruption by progressively converging management of legacy systems with cloud-native, digitized solutions built using microservices and DevOps architectures. IT architects can build generic service domains that can be re-used rather than product or channel-specific capabilities that must be re-built for every channel.

With capabilities such as low-code implementation, all users regardless of skill level are empowered to build domain-specific services that bring together best-in-class open-source tooling with pre-integrated and automated pipelines. By unifying service creation and implementation capabilities within a single solution, users can seamlessly add data and AI components within their operational use cases. By adding these behind-the-scenes efficiencies throughout the various

phases of the loan origination and approval process, the customer experience is significantly improved by delivering a decision to customers faster and, if approved, receiving cash faster.

Explore this [interactive experience](#) to learn more about the SME lending use case, enabled by IBM Cloud Paks and IBM Financial Services Workbench.

The Bigger Truth

With the banking industry undergoing an evolution to become more customer-centric with modern, digitally transformed approaches to lending, change is all but inevitable. Banks need help modernizing their traditional, legacy infrastructure that was riddled with complexity and lacked cost-effective scalability. They need guidance in how to apply automation to the right tasks with a goal of improving manual processes and reducing error-prone tasks. And they need prescriptive solutions to reduce risk when addressing the dynamic cybersecurity landscape, as well as the evolving compliance requirements throughout the lending process.

IBM has been a trusted partner in the financial services industry for decades, enabling banks to digitally transform on their terms, while achieving their data-driven and customer-centric goals. With IBM Cloud Paks, banks can embrace a hybrid cloud architecture built on AI technology that accelerates innovation and digital transformation through a tightly integrated platform of advanced capabilities and processes. Banks are empowered to leverage right-sized automation based on their needs, while improving operational efficiency, upskilling staff, increasing collaboration, and reducing risk to collectively achieve business goals faster and more reliably than ever before.

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